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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,025

07/13/2006

Nuala Macklin

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EXAMINER

CULLER, JILL E

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,025	<b>Applicant(s)</b> MACKLIN ET AL.	
	<b>Examiner</b> Jill E. Culler	<b>Art Unit</b> 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) 11-29 and 36-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20060713</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 11-29 and 36-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 21, 2009.

Applicant's election with traverse of Group 1, Claims 1-20 and 31-35 in the reply filed on August 21, 2009 is acknowledged. The traversal is on the ground(s) that Claim 1 is generic to all the groups of claims. This is not found persuasive because each group of claims represents a different invention as described in the original restriction requirement. Applicant correctly notes that, if the generic claim 1 is found to be allowable all of the remaining claims will be allowable and will be rejoined.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

Claims 2-10 and 31-35 are objected to because of the following informalities:

Claim 2 is an improper claim as the claim limitation was previously recited in claim 1 and therefore claim 2 does not further define the structure of the invention.

In claim 5, on line 1, the word "pads" is repeated unnecessarily.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-8 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,860,661 to Daoud in view of U.S. Patent No. 5,678,266 to Petringa et al.

With respect to claims 1-3, Daoud teaches an input device including at least one keypad, the keypad comprising a wrist support means, 38, and a key area, wherein the wrist support means of each keypad comprises a generally flat portion having a front and back portion and an upper and lower surface, the back portion being defined as the area of the wrist support means that is closest to a user's arm when in use and the front portion being defined as the area furthest from a user's arm when in use, the key area comprises a curved unit, 10, having a front and back portion and an upper and lower surface, the back portion being defined as the area of the key area that is closest to a user's arm when in use and the front portion being defined as the area furthest from a user's arm when in use, wherein the back portion of the key area is contiguous to the front portion of the wrist support means, the key area having a negative convex curve, so that in use the upper surface of the front portion of the key area is positioned at a lower spatial position than the upper surface of the back portion of the key area, the key area having a plurality of keys positioned on the upper surface of the key area

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intermediate the front and back portions, and wherein the keys of the key area are arranged in a series of curved rows that are parallel to or concentric with the front and back portions of the key area, so that a central key in each row is further from the users wrist relative to at least one of the end keys in each row. See column 6, lines 21-32 and Fig. 1.

Daoud does not teach that the wrist support means has a plurality of soft cushioned, gel-filled pads protruding from the upper surface of the flat portion.

Petringa et al. teaches a wrist support means, 20, comprising a plurality of soft cushioned, gel-filled pads, 22. See column 3, lines 37-52, column 4, lines 27-34 and Fig. 6.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Daoud to include a plurality of soft cushioned pads, a taught by Petringa et al. in order to enhance the comfort provided by the wrist support.

With respect to claims 4-5 and 31, Petringa et al. teaches the soft cushioned pads of the wrist support means are arranged in a generally square configuration, wherein the square configuration is orientated such that in use one or more pads provide support for the thumb joint of the hand and a plurality of pads provide stabilisation for hand and wrist movement, such that the pads occupy three adjacent corners of the overall square shape and one or more cushioned pads provided for support of the thumb joint occupies the fourth corner of the square shape. See column 3, lines 37-52, column 4, lines 27-34 and Fig. 6. Although Petringa et al. does not

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explicitly disclose the parts of the hand supported by the cushioned pads, one having ordinary skill in the art would recognize that the pads could support different parts of the hand and would arrange them accordingly.

With respect to claims 7-8, although Petringa et al. does not explicitly teach that the plurality of soft cushioned pads can be formed in a single, soft contoured moulding, wherein the moulding maintains the individual contact points for the user's wrist and/or hand and/or thumb when in use, the pads of Petringa et al. are formed as a single piece which is certainly soft and contoured and, as discussed above, would be placed appropriately for the comfort of a user.

Claims 6 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daoud in view of Petringa et al. as applied to claims 1-5, 7-8 and 31 above, and further in view of U.S. Patent No. 5,234,186 to Powell

Daoud and Petringa et al. teach all that is claimed, as in the above rejection of claims 1-5, 7-8 and 31, except that they do not explicitly teach that the overall square configuration is orientated such that in use the support for the thumb joint is positioned under the thenar eminence of the hand, the hand movement stabiliser is positioned under the hypothenar eminence and the wrist movement stabilisers are positioned under the wrist such that the wrist joint is intermediate the thumb support and the wrist stabilisers.

Powell teaches that the thenar eminence and hypothenar eminence are important parts of the hand to be supported. See column 5, lines 1-20 and Fig. 3.

Therefore, one having ordinary skill in the art at the time of the invention would find it obvious to arrange the pads in order to provide this support, as Powell teaches this is important for user comfort.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daoud in view of Petringa et al. as applied to claims 1-5, 7-8 and 31 above, and further in view of U.S. Patent No. 5,686,005 to Wright Sr.

Daoud and Petringa et al. teach all that is claimed, as in the above rejection of claims 1-5, 7-8 and 31, except that the gel filled pads include a source of heat for the user's wrist thereby warming the tendons of the wrist and hand.

Wright Sr. teaches a keypad having a source of heat for the user's wrist thereby warming the tendons of the wrist and hand. See column 2, lines 16-22, column 4, lines 9-24 and Fig. 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Daoud to include a heat source, as taught by Wright Sr., in order to improve the comfort of the user.

Claims 10, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daoud in view of Petringa et al. as applied to claims 1-5, 7-8 and 31 above, and further in view of U.S. Patent No. 6,216,988 to Hsu et al.

With respect to claims 10, 33 and 34, Daoud and Petringa et al. teach all that is claimed, as in the above rejection of claims 1-5, 7-8 and 31, except that the soft cushioned pads are formed from microcellular foam.

Hsu et al. teaches a wrist support means, 136, formed from gel or foam. See column 3, lines 48-61 and Fig. 4A.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Daoud to have the soft cushioned pads formed of foam, as taught by Hsu et al., as Hsu et al. teaches this is an acceptable alternative material for this application.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daoud in view of Petringa et al. and Powell as applied to claims 6 and 32 above, and further in view of Hsu et al.

Daoud, Petringa et al. and Powell teach all that is claimed, as in the above rejection of claims 6 and 32, except that the soft cushioned pads are formed from microcellular foam.

Hsu et al. teaches a wrist support means, 136, formed from gel or foam. See column 3, lines 48-61 and Fig. 4A.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Daoud to have the soft cushioned pads formed of foam, as taught by Hsu et al., as Hsu et al. teaches this is an acceptable alternative material for this application.



***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571)272-2159. The examiner can normally be reached on M-F 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jec

/Jill E. Culler/  
Primary Examiner, Art Unit 2854